Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >
Title	Call for Contributions for Modifications of 802.16 MAC and 802.11a-HIPERLAN/2 PHY for the WirelessHUMAN TM Standard
Date Submitted	2000-11-17
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Re:	WirelessHUMAN TM PAR (IEEE 802.16 h -00/ 13r3)
	<http: 16="" 80216h-00_13r3.pdf="" docs="" human="" ieee802.org=""></http:>
Abstract	Call for Contributions for Proposed Modification of Specified MAC/PHY standards for WirelessHUMAN TM systems
Purpose	To encourage proposals initiating the WirelessHUMAN [™] standardization effort
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Call for Contributions for Modifications of 802.16 MAC and 802.11a-HIPERLAN/2 PHY for the WirelessHUMAN[™] Standard

Deadline: 13 January 2001

On 9 November 2000, the IEEE 802 LAN/MAN Standards Committee accepted a proposal by the IEEE 802.16 Working Group on Broadband Wireless Access to initiate a new standards project entitled "Air Interface for Fixed Broadband Wireless Access Systems including License-Exempt Frequencies." Final approval for this project is on the agenda of the IEEE-SA Standards Board on 7 December 2000.

The project proposal, which addresses a standard for public metropolitan area networks in the unlicensed (i.e., license-exempt) bands, was drafted by 802.16's WirelessHUMANTM (Wireless High-speed Unlicensed Metropolitan Area Networks) Study Group. The WirelessHUMANTM Study Group operated from through 9 March through 10 November 2000. It has been replaced by a new 802.16 Task Group 4 (the 802.16 WirelessHUMANTM Task Group).

The WirelessHUMANTM Project Authorization Request (PAR) specifies a primary focus on 5-6 GHz. The PAR further specifies that the WirelessHUMANTM Standard will consist of modifications of the following standards:

- 1. IEEE 802.16 MAC
- 2. IEEE 802.11a PHY and HIPERLAN/2 PHY

The WirelessHUMANTM Task Group seeks specific contributions addressing details of such modifications and addressing the following key issues:

a) Potential modifications to 802.11a PHY / HIPERLAN/2 PHY:

- Operation in presence of interference in MAN environments
- Modifications to 802.11a channel plan
- Accommodate increased propagation delay and multipath
- Dynamic Frequency Selection
- Adaptive Power Control
- Cellular deployment with sectorization and frequency reuse
- Improved Error Control
- PAPR (Peak to Average Power Ratio) reduction mechanisms
- b) Input on channel models specific to 5-6 GHz bands
- c) Potential modifications to 802.16 MAC:
 - Coexistence strategies and techniques to mitigate interference in the unlicensed bands
 - QoS availability in unlicensed environments
 - Are the recommendations of 802.16's Task Group 3 to modify the 802.16.1 MAC applicable to WirelessHUMAN[™] systems?
- d) Input on mutually acceptable co-existence strategies for 802 wireless systems
- e) Input on criteria for evaluation of candidate proposals

Contributions must be submitted using the current version (Rev. 8.2) of the 802.16 Document Submission Template http://www.ieee802.org/16/docs/802_16_template.doc. Contributions will be considered non-

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confidential and will be posted as soon as possible after receipt for public access on the 802.16 web site. Contributions submitted by the deadline will be addressed at 802.16 Session #11 (22-26 January 2001 in Ottawa, Canada).

Email your contribution to each of the following:

- IEEE 802.16 Task Group 4 Chair Durga P. Satapathy <mailto:durga.satapathy@mail.sprint.com>
- IEEE 802.16 Task Group 4 Secretary (Ken Peirce) <mailto:ken@malibunetworks.com>
- IEEE 802.16 Chair Roger Marks <mailto:marks@nist.gov>